

AMENDMENTS TO THE CLAIMS

1.-7. (Canceled)

8. (Original) A process for producing a polar-group-containing cyclized rubber, comprising:
the steps of:

using an organic active metal catalyst to polymerize a conjugated diene monomer, or a conjugated diene monomer and a monomer copolymerizable with the conjugated diene monomer to produce an active conjugated diene polymer having an active metal at a terminal of a polymer chain thereof;

causing a polar-group-containing compound to react with the active conjugated diene polymer to produce a polar-group-containing conjugated diene polymer having, at a terminal of a polymer chain thereof, a polar group originating from the polar group in the polar-group-containing compound; and

using a cyclizing catalyst to cyclize the polar-group-containing conjugated diene polymer to produce the polar-group-containing cyclized rubber.

9. (Original) The process for producing a polar-group-containing cyclized rubber according to claim 8, wherein the conjugated diene monomer is isoprene.

10. (Previously presented) The process for producing a polar-group-containing cyclized rubber according to claim 8, wherein the polar-group-containing compound is an epoxy compound or carbon dioxide.

11. (Original) A process for producing a polar-group-containing cyclized rubber, comprising:
the steps of:

using a polar-group-containing organic active metal catalyst to polymerize a conjugated diene monomer, or a conjugated diene monomer and a monomer copolymerizable with the conjugated diene monomer to produce a polar-group-containing conjugated diene polymer having a polar group at a polymerization initiation terminal thereof; and

using a cyclizing catalyst to cyclize the polar-group-containing conjugated diene polymer to produce the polar-group-containing cyclized rubber.

12. (Original) The process for producing a polar-group-containing cyclized rubber according to claim 11, wherein the polar-group-containing organic active metal catalyst is an organic alkali metal amide compound.

13. (Previously presented) The process for producing a polar-group-containing cyclized rubber according to claim 11, wherein the conjugated diene monomer is isoprene.

14.-20. (canceled)

21. (New) A polar-group-containing cyclized rubber, processed by the process for producing a polar-group-containing cyclized rubber according to claim 8 or 11, having a polar group at a terminal of a polymer chain thereof and having a weight-average molecular weight of 1,000 to 1,000,000.

22. (New) The polar-group-containing cyclized rubber according to claim 21, wherein the ratio of the weight-average molecular weight (Mw) to the number-average molecular weight (Mn) thereof (Mw/Mn) is 4 or less.

23. (New) The polar-group-containing cyclized rubber according to claim 21, wherein the cyclization ratio is 10% or more.

24. (New) The polar-group-containing cyclized rubber according to claim 21, wherein the glass transition temperature is from -50 to 200°C.

25. (New) The polar-group-containing cyclized rubber according to claim 21, wherein the gel amount is 10% or less by weight.

26. (New) The polar-group-containing cyclized rubber according to claim 21, wherein the polar group is at least one group selected from the group consisting of carboxyl, hydroxyl, amino, thiol, ester, cyano and silyl groups.

27. (New) The polar-group-containing cyclized rubber according to claim 21, wherein the polar group is carboxyl or hydroxyl group.

28. (New) A modifier for polymer-molding material, which comprises, as an effective component, the polar-group-containing cyclized rubber according to claim 21.

29. (New) A polymer composition, wherein the modifier for polymer-molding material according to claim 28 is incorporated into a polymer-molding material.
30. (New) The polymer composition according to claim 29, wherein the incorporated amount of the modifier for polymer-molding material is from 0.1 to 50 parts by weight for 100 parts by weight of the polymer in the polymer-molding material.
31. (New) The polymer composition according to claim 29, wherein the polymer in the polymer-molding material is a hydrocarbon thermoplastic resin.
32. (New) A coating agent, which comprises the polar-group-containing cyclized rubber according to claim 21.
33. (New) The coating agent according to claim 32, which is a primer.